**IN THE CLAIMS:**

1. (Currently amended) A method for megasonic cleaning a substrate, comprising the steps of:

a) providing a container;

b) providing a first megasonic transducer with a first active surface or a first array of megasonic transducers with a first array active surface for providing vibrational energy in said container;

c) disposing a substrate in said container substantially parallel to and spaced a first spacing from said first ~~transducer~~ active surface or from said first array active surface;

d) flowing a fluid through said first spacing ~~space between the substrate and said first transducer~~;

e) immersing the ~~wafer with~~ substrate in said fluid in said container; and

f) applying energy to said first megasonic transducer or to said first array of megasonic transducers to provide vibration in said fluid and to clean the substrate wherein no substantially comparable amount of energy is provided to a transducer having an active surface facing perpendicular to said first active surface or perpendicular to said first array active surface.

2. (Original) A method as recited in claim 1, further comprising the step of providing relative motion between said individual substrate and said transducer in a direction substantially parallel to the substrate, while performing said fluid-flowing and energy-applying steps (d) and (f).

3. (currently amended) A method as recited in claim 1, wherein said individual substrate has a substrate surface area and said first active surface or said first array active surface has an area at least equal to 40% of the substrate surface area.

4. (currently amended) A method as recited in claim 1, wherein the substrate has a maximum diameter and said ~~space~~ first spacing is in a range from 1% to 80% of said maximum diameter.

5. (currently amended) A method as recited in claim 1, wherein said ~~space~~ first spacing is in a range from 1 micrometer to 160 millimeters.

6. (currently amended) A method as recited in claim 1, wherein said megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a frequency of at least 400 kilohertz.

7. (currently amended) A method as recited in claim 1, wherein said megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a maximum power of at least 400 watts.

8. (currently amended) A method as recited in claim 7, wherein said megasonic energy is applied to said first megasonic transducer or said first array of megasonic transducers with 20% to 100% of said maximum power.

9. (currently amended) A method as recited in claim 1, wherein said first megasonic transducer has an area and a total input power and wherein said input power divided by said ~~transducer~~ area is at least four watts per square centimeter.

10. (currently amended) A method as recited in claim 1, wherein said flowing a fluid step (d) comprises flowing a fluid through said ~~space between the substrate and said transducer~~ first spacing at a fluid flow rate sufficient to carry particles away from the substrate before they redeposit on the substrate.

11. (currently amended) A method as recited in claim 1, wherein said container has a volume and wherein said flowing a fluid step ( d) comprises flowing a fluid through said ~~space between the substrate and said transducer~~ first spacing at a rate to replace the fluid in said volume in less than or equal to one minute.

12. (currently amended) ~~The~~ A method as recited in claim 1, further comprising the step of providing a second megasonic transducer with a second active surface or a second array of megasonic transducers with a second array active surface in said tank, wherein said second active surface or said second array active surface faces said first active surface or said first array active surface, and is substantially parallel to and spaced a second spacing from said first active surface or said first array active surface.

13. (currently amended) ~~The~~ A method as recited in claim 12, wherein in said providing step (b) said first megasonic transducer or said first array of megasonic transducers and said second megasonic transducer or said second array of megasonic transducers are both completely immersed in said fluid.

14. (currently amended) ~~The~~ A method as recited in claim 12, wherein said disposing step (c) comprises disposing the substrate in the tank between said first active surface or said first array active surface and said second active surface or said second array active surface.

15. (currently amended) ~~The~~ A method as recited in claim 14, wherein said flowing step (d) further comprises flowing the fluid through ~~space between the substrate and the second active surface~~ said second spacing.

16. (currently amended) ~~The~~ A method as recited in claim 15, wherein said applying energy step (f) further comprises applying energy to said second megasonic transducer.

17. (currently amended) ~~The~~ A method as recited in claim 12, wherein said ~~transducers~~ first megasonic transducer and said second megasonic transducer provide energy to clean both sides and edges of the substrate.

18. (currently amended) ~~The~~ A method as recited in claim 1, wherein said fluid comprises one of deonized water, dilute RCA cleaning solution and dilute citric acid solution.

19. (Canceled)

20. (Canceled) The method as recited in claim 1, wherein in said providing step (b) said first active surface or said first array active surface is arranged in a vertical plane.

21. (currently amended) ~~The~~ A method as recited in claim 1, wherein in said flowing step (d) fluid is provided in said tank at a lower level than it exits said tank

22. (currently amended) ~~The~~ A method as recited in claim 1, wherein in said providing step (b) said first transducer is completely immersed in said fluid.

23. (currently amended) A method for megasonic cleaning a substrate, comprising the steps of:

a) providing a container comprising a first megasonic transducer with a first active surface arranged in a horizontal plane, wherein said first magasonic transducer is held in a fixed position ~~in said container~~;

b) disposing a single substrate in said container substantially parallel to and spaced a spacing from said first active surface or said first array active surface;

c) immersing the single substrate in a fluid and flowing said ~~a~~ fluid through said spacing ~~space between the substrate and said first active surface~~; and

d) applying energy to said first megasonic transducer.

24-40. (Canceled)

41. (Currently amended) An apparatus for megasonic cleaning a substrate, comprising:

a container for immersing a substrate in a fluid;

a first megasonic transducer with a first active surface ~~in the fluid in said container~~ or a first array of megasonic transducers with a first array active surface for providing energy to clean the immersed substrate when the substrate is placed substantially parallel to and spaced from said first active surface or from said first array active surface, wherein no transducer is in said container having an active surface facing perpendicular to said first active surface or perpendicular to said first array active surface.

42. (Currently amended) An apparatus as recited in claim 41, further comprising means for providing relative motion between the substrate and said first megasonic transducer or said first array of megasonic transducers in a direction substantially parallel to ~~the substrate surface~~ said first active surface or said first array active surface while flowing said fluid and applying said megasonic energy.

43. (Currently amended) An apparatus as recited in claim 41, wherein the substrate has a major surface area and the substrate is disposed so that said first transducer or said first array of megasonic transducers faces at least 40% of said major substrate surface area.

44. (Currently amended) An apparatus as recited in claim 41, wherein said substrate has a maximum diameter and ~~said space is~~ the immersed substrate is spaced a distance in a range from 1% to 80% of said maximum diameter.

45. (Currently amended) An apparatus as recited in claim 41, wherein ~~said space is~~ the immersed substrate is spaced a distance in a range from 1 micrometer to 160 millimeters.

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46. (Currently amended) An apparatus as recited in claim 41, wherein ~~said~~ megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a maximum power of at least 400 watts.

47. (Currently amended) An apparatus as recited in claim ~~28~~ 46, wherein said megasonic energy ~~is~~ applied to said first megasonic transducer ~~with~~ has 20% to 100% of said maximum power.

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48. (Currently amended) An apparatus as recited in claim 41, wherein said first transducer or said first array of megasonic transducers has ~~a transducer area and~~ a total input power and wherein said first active surface or said first array active surface has an area wherein said input power divided by said ~~transducer~~ area is at least four watts per square centimeter.

49. (Currently Amended) An ~~The~~ apparatus as recited in claim 41, further comprising a second megasonic transducer with a second active surface or a second array of megasonic transistors with a second array active surface in said ~~tank~~ container, wherein said second active surface or said second array active surface faces said first active surface or said first array active surface and is substantially parallel to and spaced from said first active surface or said first array active surface for cleaning both sides of a substrate and edges of a substrate placed between said first active surface or said first array active surface and said second active surface or said second array active surface .

50. (Currently Amended) An ~~The~~ apparatus as recited in claim 49, wherein said first megansonic transducer and said second megasonic transducer are disposed vertically.

51. (Cancel) An ~~The~~ apparatus as recited in claim 49, wherein said first transducer comprises an array of transducers.

52. (Currently Amended) An ~~The~~ apparatus as recited in claim ~~51~~ 49, wherein said first array of transducers are disposed horizontally and wherein openings between transducers of said first array of transistors permit fluid to flow there through.

53. (Currently Amended) An ~~The~~ apparatus as recited in claim 49, wherein said first transducer or said first array of transistors is in a fixed position and said second transducer or said second array of transistors is moveable.

54. (Currently Amended) An ~~The~~ apparatus as recited in claim 49, wherein said first transducer or said first array of transistors and said second transducer or said second array of transistors are both completely immersed in said fluid.

55. (Currently Amended) An ~~The~~ apparatus as recited in claim 41, wherein said fluid comprises one of ~~deonized~~ deionized water, ~~dilute~~ RCA cleaning solution and ~~dilute~~ citric acid solution.

56. (Currently Amended) An ~~The~~ apparatus as recited in claim 41, wherein said first active surface or said first array active surface is arranged in a horizontal plane.

57. (Currently Amended) An ~~The~~ apparatus as recited in claim 41, wherein said first active surface or said first array active surface is arranged in a vertical plane.

58. (Currently Amended) An ~~The~~ apparatus as recited in claim 41, wherein said first transducer or said first array of transistors is completely immersed in said fluid.

59. (New) A method for megasonic cleaning a substrate, comprising the steps of:

(a) providing a container;

(b) providing a first megasonic transducer with a first active surface or a first array of megasonic transducers with a first array active surface, wherein said first active surface or said first array active surface is arranged in a horizontal plane to provide megasonic vibration in said container;

(c) disposing a single substrate in said container facing, substantially parallel to, and spaced a first spacing from said first active surface or said first array active surface;

(d) providing a fluid in said container, immersing the substrate in said fluid, and flowing said fluid through said spacing; and

(e) applying energy to said first megasonic transducer.

60. (New) A method as recited in claim 59, wherein said individual substrate has a substrate surface area and said first active surface or said first array active surface has an area at least equal to 40% of the substrate surface area.

61. (New) A method as recited in claim 59, wherein said individual substrate has a substrate surface and said first megasonic transducer or said first array of megasonic transducers is larger than said substrate surface.

62. (New) A method as recited in claim 59, wherein the substrate has a maximum diameter and said first spacing is in a range from 1% to 80% of said maximum diameter.

63. (New) A method as recited in claim 59, wherein said first spacing is in a range from 1 micrometer to 160 millimeters.

64. (New) A method as recited in claim 59, wherein said megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a frequency of at least 400 kilohertz.

65. (New) A method as recited in claim 59, wherein said megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a maximum power of at least 400 watts.

66. (New) A method as recited in claim 65, wherein said megasonic energy is applied to said first megasonic transducer or said first array of megasonic transducers with 20% to 100% of said maximum power.

67. (New) A method as recited in claim 59, wherein said first megasonic transducer has an area and a total input power and wherein said input power divided by said transducer area is at least four watts per square centimeter.

68. (New) A method as recited in claim 59, wherein said flowing a fluid step (d) comprises flowing a fluid through said space between the substrate and said transducer first spacing at a fluid flow rate sufficient to carry particles away from the substrate before they redeposit on the substrate.

69. (New) A method as recited in claim 59, wherein said container has a volume and wherein said flowing a fluid step (d) comprises flowing a fluid through said space between the substrate and said transducer first spacing at a rate to replace the fluid in said volume in less than or equal to one minute.

70. (New) A method as recited in claim 59, further comprising the step of providing a second megasonic transducer with a second active surface or a second array of megasonic transducers with a second array active surface in said tank, wherein said second active surface or said second array active surface faces said first active surface or said first array active surface, and is substantially parallel to and spaced a second spacing from said first active surface or said first array active surface.

71. (New) A method as recited in claim 70, wherein in said providing step (b) said first megasonic transducer or said first array of megasonic transducers and said second megasonic transducer or said second array of megasonic transducers are both completely immersed in said fluid.

72. (New) A method as recited in claim 70, wherein said disposing step (c) comprises disposing the substrate in the tank between said first active surface or said first array active surface and said second active surface or said second array active surface.

73. (New) A method as recited in claim 72, wherein said flowing step (d) further comprises flowing the fluid through said second spacing.

74. (New) A method as recited in claim 73, wherein said applying energy step (f) further comprises applying energy to said second megasonic transducer.

75. (New) A method as recited in claim 70, wherein said first megasonic transducer and said second megasonic transducer provide energy to clean both sides and edges of the substrate.

76. (New) A method as recited in claim 59, wherein said fluid comprises one of deonized water, dilute RCA cleaning solution and dilute citric acid solution.

77. (New) A method as recited in claim 1, wherein said first megasonic transducer or said first array of megasonic transducers is larger than said substrate.

78. (New) A method as recited in claim 23, wherein said first megasonic transducer is larger than said single substrate.

79. (New) A method as recited in claim 41, wherein said first megasonic transducer or said first array of megasonic transducers is larger than said substrate.